

Remarks

Applicant respectfully requests reconsideration and allowance of the pending claims in light of the foregoing amendments and following remarks.

Claims 4-10, 13-15, and 18-26 remain pending.

Claims 1-3, 11, 12, 16, and 17 are cancelled without prejudice.

Claims 6, 9, 14, 21, and 23-26 are amended. No new matter is added.

Claims 1-24 are rejected. These rejections are respectfully traversed.

Allowable Subject Matter

The Office Action (“Action”) objects to each of dependent claims 24-26 as being dependent upon a rejected base claim but indicates that each claim would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant submits that dependent claims 24-26 are each rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Accordingly, Applicant submits that claims 24-26 are in condition for allowance and such action is respectfully requested.

Claim Rejections under 35 U.S.C. § 102

The Action rejects claims 1-23 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,426,182 to Wang (“Wang”).

Applicant submits that claims 1-3, 11, 12, 16, and 17 are cancelled, thereby rendering moot the 35 U.S.C. § 102(e) rejections thereof.

Applicant traverses the rejections of remaining claims 4-10, 13-15, and 18-23.

Claim 4

Independent claim 4 is directed to a system for allocating a plurality of DSPs to handle calls in a voice gateway, said calls utilizing a plurality of different codecs, said codecs requiring a plurality of different amounts of DSP resources, and recites the following features:

means for first determining if the call can be assigned to a DSP on a best fit basis utilizing a best fit pool which indicates the DSPs that would be fully loaded by a call using a codec in the associated resource group; and

means, operable if a call can not be assigned on a best fit basis, for assigning the call to a DSP utilizing a load balancing pool which indicates the number of calls on each DSP.

Wang does not teach a “best fit pool” (“BF pool”), let alone “means for first determining if the call can be assigned to a DSP on a best fit basis utilizing a best fit pool which indicates the DSPs that would be fully loaded by a call using a codec in the associated resource group,” as recited in independent claim 4. Applicant directs the Examiner’s attention to the Specification of the present application at page 3, line 12, to page 4, line 7, and at page 6, line 19, to page 8, line 2. For example, the Specification states at page 3, lines 13-15, that “[t]he BF pool indicates those DSPs that have just enough capacity left to handle one particular type of codec or that are a best fit due to the existence of a FCP.” In contrast, Wang simply describes a method that includes identifying “a first signal processor having a maximum amount of available bandwidth” and, “[i]f the bandwidth of the first signal process is insufficient, . . . determining whether an amount of available bandwidth in a second signal processor is sufficient” (*see* col. 2, line 51, to col. 3, line 2, as noted in the Action).

Furthermore, Wang does not teach a “load balancing pool” (“LB pool”), let alone “means, operable if a call can not be assigned on a best fit basis, for assigning the call to a DSP utilizing a load balancing pool which indicates the number of calls on each DSP,” as recited in independent claim 4. Applicant directs the Examiner’s attention to the Specification of the present application at page 3, lines 1-10, and at page 5, line 33, to page 6, line 8. For example, the Specification states at page 3, lines 8-9, that “[t]he number of entries in this pool is equal to the maximum number of calls that can be handled by a single DSP.” In contrast, Wang simply describes a method that includes “determining an amount of spare bandwidth in a plurality of processors and selecting the processor with the greatest amount of spare bandwidth” (*see* col. 3, lines 3-8, as noted in the Action).

Because Wang does not teach each and every element recited in independent claim 4, the 35 U.S.C. § 102(e) rejection of independent claim 4 should be withdrawn and such action is respectfully requested.

Claim 5

Independent claim 5 is directed to a method of allocating a plurality of resources to handle tasks, said tasks utilizing a plurality of different amounts of resources, and recites the following features:

first determining if a task can be assigned to a resource on a best fit basis utilizing a best fit pool which indicates the resources that would be substantially fully loaded by a task in an associated resource group, the codecs in each resource group requiring substantially the same amount of resources; and
if a task can not be assigned on a best fit basis, assigning the task to a resource utilizing a load balancing pool which indicates the number of tasks assigned to each resource.

As discussed above, Wang does not teach a “best fit pool” and, therefore, does not teach at least “first determining if a task can be assigned to a resource on a best fit basis utilizing a best fit pool which indicates the resources that would be substantially fully loaded by a task in an associated resource group, the codecs in each resource group requiring substantially the same amount of resources,” as recited in independent claim 5.

Furthermore, Wang does not teach a “load balancing pool” as discussed above and, therefore, does not teach at least “if a task can not be assigned on a best fit basis, assigning the task to a resource utilizing a load balancing pool which indicates the number of tasks assigned to each resource,” as recited in independent claim 5.

Because Wang does not teach each and every feature recited in independent claim 5, the 35 U.S.C. § 102(e) rejection of independent claim 5 should be withdrawn and such action is respectfully requested.

Claim 6

Dependent claim 6 depends from independent claim 26 and is allowable for at least the same reasons that pertain to the parent claim 26. Dependent claim 6 is also independently patentable.

Accordingly, the 35 U.S.C. § 102(e) rejection of dependent claim 6 should be withdrawn and such action is respectfully requested.

Claims 7 and 19

Independent claim 7 is directed to a method of allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of different codecs, at least some of said codecs requiring different amounts of DSP resources, and recites the following features:

establishing a best fit pool which has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource, and for each particular resource group indicating which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group;
establishing a load balancing pool that has a number of call load groups, the DSPs in each call load group handling a same number of calls;
first determining if a particular call can be assigned to a DSP based on the information in the best fit pool; and
if a call can not be assigned on a best fit basis, assigning said particular call on a load balancing basis using the information in said load balancing pool.

As discussed above, Wang does not teach a “best fit pool” and, therefore, does not teach at least “establishing a best fit pool which has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resource, and for each particular resource group indicating which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group” and “first determining if a particular call can be assigned to a DSP based on the information in the best fit pool,” as recited in independent claim 7.

Furthermore, Wang does not teach a “load balancing pool” as discussed above and, therefore, does not teach at least “establishing a load balancing pool that has a number of call load groups, the DSPs in each call load group handling a same number of calls” and “if a call can not be assigned on a best fit basis, assigning said particular call on a load balancing basis using the information in said load balancing pool,” as recited in independent claim 7.

Because Wang does not teach each and every feature recited in independent claim 7, the 35 U.S.C. § 102(e) rejection of independent claim 7 should be withdrawn and such action is respectfully requested.

Dependent claim 19 depends from independent claim 7 and is allowable for at least the same reasons that pertain to the parent claim 7. Dependent claim 19 is also independently patentable.

Accordingly, the 35 U.S.C. § 102(e) rejection of dependent claim 19 should be withdrawn and such action is respectfully requested.

Claims 8 and 20

Independent claim 8 is directed to a system for allocating tasks to a plurality of DSPs to handle calls in a voice gateway that receives calls, said calls utilizing a plurality of different codecs, at least some of said codecs requiring different amounts of DSP resources, and recites the following features:

- a best fit pool which has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resources to handle a call, and for each particular resource group indicating which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group;
- a load balancing pool which has a number of call load groups, the DSPs in each call load group handling the same number of calls;
- means for determining if a particular call can be assigned to a DSP based on the information in the best fit pool; and
- means, operable if a call can not be assigned on a best fit basis, for assigning said particular call on a load balancing basis using the information in said load balancing pool.

As discussed above, Wang does not teach a “best fit pool” and, therefore, does not teach at least “a best fit pool which has a number of codec resource groups, the codecs in each codec resource group utilizing the same amount of DSP resources to handle a call, and for each particular resource group indicating which DSPs would be fully loaded if they were assigned a call using a codec in the particular resource group” and “means for determining if a particular call can be assigned to a DSP based on the information in the best fit pool,” as recited in independent claim 8.

Furthermore, Wang does not teach a “load balancing pool” as discussed above and, therefore, does not teach at least “a load balancing pool which has a number of call load groups, the DSPs in each call load group handling the same number of calls” and “means, operable if a call can not be assigned on a best fit basis, for assigning said particular call on a load balancing basis using the information in said load balancing pool,” as recited in independent claim 8.

Because Wang does not teach each and every feature recited in independent claim 8, the 35 U.S.C. § 102(e) rejection of independent claim 8 should be withdrawn and such action is respectfully requested.

Dependent claim 20 depends from independent claim 8 and is allowable for at least the same reasons that pertain to the parent claim 8. Dependent claim 20 is also independently patentable.

Accordingly, the 35 U.S.C. § 102(e) rejection of dependent claim 20 should be withdrawn and such action is respectfully requested.

Claims 9, 10, and 13

Dependent claims 9, 10, and 13 depend directly or indirectly from independent claim 24 and are allowable for at least the same reasons that pertain to the parent claim 24. Dependent claims 9, 10, and 13 are also independently patentable.

Accordingly, the 35 U.S.C. § 102(e) rejections of dependent claims 9, 10, and 13 should be withdrawn and such action is respectfully requested.

Claims 14, 15, and 18

Dependent claims 14, 15, and 18 depend directly or indirectly from independent claim 25 and are allowable for at least the same reasons that pertain to the parent claim 25. Dependent claims 14, 15, and 18 are also independently patentable.

Accordingly, the 35 U.S.C. § 102(e) rejections of dependent claims 14, 15, and 18 should be withdrawn and such action is respectfully requested.

Claims 21-23

Independent claim 21 is amended to recite features that are similar to features recited in independent claim 26. Therefore, independent claim 21 should be allowed for at least the same reasons that pertain to independent claim 26.

Accordingly, the 35 U.S.C. § 102(e) rejection of independent claim 21 should be withdrawn and such action is respectfully requested.

Dependent claims 22 and 23 depend directly or indirectly from independent claim 21 and are allowable for at least the same reasons that pertain to the parent claim 21. Dependent claims 22 and 23 are also independently patentable.

Accordingly, the 35 U.S.C. § 102(e) rejections of dependent claims 22 and 23 should be withdrawn and such action is respectfully requested.

Conclusion

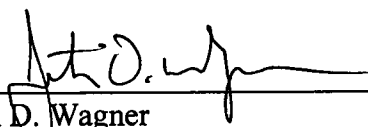
Applicant submits that the present application is in condition for allowance and such action is respectfully requested.

The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

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Respectfully submitted,

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